

CLAIM AMENDMENTS

What follows is a complete list of claims currently pending in the application.

Please cancel claims 3-19 and 28. Please amend claims 20 and 29 as shown.

1. (Original) A method of making a semiconductor device comprising:
forming a first in-situ doped silicon layer over a substrate material in a pressure vessel while introducing a precursor gas;
without removing the substrate material from the pressure vessel,
discontinuing introduction of the precursor gas and forming an undoped silicon capping layer on and in contact with the doped silicon layer;
and removing the undoped silicon capping layer.
2. (Original) The method of claim 1 wherein the undoped silicon capping layer is removed by CMP.
- 3.-19. (Cancelled)
20. (Currently amended) A method of making a silicon-based electronic device comprising the steps of:
forming a first doped silicon layer in a pressure vessel over a surface of a product wafer substrate material while introducing a precursor gas;
and
without removing the substrate material from the pressure vessel,
discontinuing introduction of the precursor gas and forming an undoped silicon capping layer on and in contact with the first doped silicon layer,
wherein the layers form a portion of a three dimensional memory array,
the three dimensional memory array comprising memory cells disposed at numerous levels above a substrate.

21. (Original) The method of claim 20 wherein the undoped capping layer is thinner than the first doped layer.
22. (Original) The method of claim 21 wherein the thickness of the undoped capping layer is between about 500 and about 200 angstroms.
23. (Original) The method of claim 20 further comprising forming a second doped layer on and in contact with the undoped capping layer.
24. (Original) The method of claim 23 wherein the first doped layer is formed with n-type or p-type dopants and the second layer is formed with n-type or p-type dopants, the type of the second layer opposite the type of the first layer.
25. (Original) A method of making a semiconductor device comprising:
forming a first in-situ doped silicon layer over a substrate material in a pressure vessel while introducing a precursor gas;
without removing the substrate material from the pressure vessel,
discontinuing introduction of the precursor gas and forming an undoped silicon capping layer on the doped silicon layer; and
consuming or removing the undoped silicon capping layer, wherein the semiconductor device is a memory device.
26. (Original) The method of claim 25, wherein the undoped silicon capping layer is removed by CMP.
27. (Original) The method of claim 25, wherein the undoped silicon capping layer is reactively consumed.
28. (Cancelled)

29. (Currently amended) The method of claim 25, wherein the memory device is a portion of a three dimensional memory array, the three dimensional memory array comprising memory cells disposed at numerous levels above a substrate.
30. (Original) The method of claim 25 wherein the undoped capping layer, when formed, is thinner than the first doped layer.
31. (Original) The method of claim 30 wherein the thickness of the undoped capping layer is between about 500 and about 200 angstroms.